ABSTRACT

An apparatus for operably connecting an electrical source to a conductive coating or film. The apparatus may include a substrate made of a structural material. A conductive coating or thin film may be applied to the substrate. An interface layer may be applied over the conductive coating and conduct electricity thereto while transferring insufficient force to separate the conductive coating from the substrate. A conductor, for providing electricity to the interface layer comprising strands configured to be separable and electrically conductive, may be positioned in contact with the interface layer. A clamping mechanism may apply a clamping load urging the conductor toward the conductive coating. The strands of the conductor may be formed to distribute mechanical stress and strain induced by thermal expansion and the clamping load sufficiently to substantially reduce damage to the mechanical and electrical integrity of the conductive coating.

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